

SEQUENCE LISTING

<110> INVITROGEN CORPORATION
 CHESTNUT, John
 SHUMAN, Stewart
 HEYMAN, John
 MADDEN, Knut
 BENNETT, Rob

<120> METHODS AND REAGENTS FOR MOLECULAR CLONING

<130> INVIT1300-1

<150> US 60/226,563

<151> 2000-08-21

<160> 18

<170> PatentIn version 3.0

<210> 1

<211> 12

<212> DNA

<213> Artificial sequence

<220>

<223> Vaccinia topoisomerase cleavable sequence

<400> 1

gcccttattc cc

12

<210> 2

<211> 12

<212> DNA

<213> Artificial sequence

<220>

<223> Vaccinia topoisomerase cleavable sequence

<400> 2

tcgcccttat tc

12

<210> 3

<211> 12

<212> DNA

<213> Artificial sequence

<220>

<223> Vaccinia topoisomerase cleavable sequence

<400> 3

tgtcgccctt at

12

<210> 4

<211> 12

<212> DNA

<213> Artificial sequence

<220>

Sequence Listing

Sub
a1

<223> Vaccinia topoisomerase cleavable sequence

<400> 4
gtgtcggcct ta 12

<210> 5
<211> 28
<212> DNA
<213> Artificial sequence

<220>
<223> Adapter oligonucleotide

<400> 5
aattgatccc ttcaccgaca tagtacag 28

<210> 6
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> Adapter oligonucleotide

<400> 6
ggtgaaggga tc 12

<210> 7
<211> 11
<212> DNA
<213> Artificial sequence

<220>
<223> Adapter oligonucleotide

<400> 7
aagggcgagc t 11

<210> 8
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> Adapter oligonucleotide

<400> 8
cgcccttgac atagtacag 19

<210> 9
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> Intermediate vector overhang sequence

<400> 9
gacatagtac ag 12

<210> 10
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> Annealing oligonucleotide

<400> 10
caactgtact atgtc 15

<210> 11
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Adopter oligonucleotide

<400> 11
agctcgccct tattccgata gtg 23

<210> 12
<211> 11
<212> DNA
<213> Artificial sequence

<220>
<223> Adopter oligonucleotide

<400> 12
gaataagggc g 11

<210> 13
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Adopter oligonucleotide

<400> 13
aattcgccct tattccgata gtg 23

<210> 14
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> Intermediate vector overhang sequence

```
<400> 14
attccgatatg tg
```

12

```
<210> 15
<211> 15
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> Annealing oligonucleotide
```

```
<400> 15
caacactatc ggaat
```

15

```
<210> 16
<211> 2290
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> pUni/V5-His version A vector
```

<400>	16						
aattccccatg	tcagccggtta	agtgttcctg	tgtcactcaa	aattgctttg	agaggctcta		60
agggctttctc	agtgcgttac	atccctgggt	tgttgtccac	aaccgttaaa	ccttaaaagc		120
tttaaaagcc	ttatatattc	ttttttttct	tataaaactt	aaaaccttag	aggctattta		180
agttgctgat	ttatattaat	tttattgttc	aaacatgaga	gcttagtacg	tgaaacatga		240
gagcttagta	cgttagccat	gagagcttag	tacgttagcc	atgaggggtt	agttcggttaa		300
acatgagagc	ttagtacgtt	aaacatgaga	gcttagtacg	tgaaacatga	gagcttagta		360
cgtactatca	acaggttgaa	ctgctgatca	acagatcctc	tacgcggccg	cggtaccata		420
acttcgtata	gcatacatta	tacgaagtta	tcggaggaat	tggctcgagg	aattcaccgg		480
tgccgtgtgg	gcggatccgg	gcccgaacgtc	aggcctcgat	cggagctcgg	taagcctatc		540
cctaaccctc	tcctcggtct	cgattctagc	catcatcacc	atcaccattg	aagctcgcta		600
tcagcctcga	ctgtgccttc	tagttgccag	ccatctgttg	tttgcccctc	ccccgtgcct		660
tccttgacct	tggaaggtgc	cactcccact	gtcctttcct	aataaaatga	ggaaattgca		720
tcgcattgtc	tgagtaggtg	tcattctatt	ctgggggggtg	gggtggggca	ggacagcaag		780
ggggaggatt	gggaagacaa	tagcaggcat	gctgggggatt	ctagaagatc	cggctgctaa		840
caaagcccga	aaggaagctg	agttggctgc	tgccaccgct	gagcaataac	tagcataacc		900
ccttggggcc	tctaaacggg	tcttgagggg	ttttttgctg	aaaggaggaa	ctatatccgg		960
atatcccggg	gtgggcgaag	aactccagca	tgagatcccc	gcgctggagg	atcatccagc		1020
cggcgtcccc	gaaaacgatt	ccgaagccca	acctttcata	gaaggcggcg	gtggaatcga		1080

[illegible]

aatctcgtga tggcaggttg ggcgtcgtt ggtcgggtcat ttcgaacccc agagtcccgc 1140
tcagaagaac tcgtcaagaa ggcgatagaa ggcgatgcgc tgcgaatcgg gagcggcgat 1200
accgtaaagc acgaggaagc ggtcagccca ttcgccgcca agctcttcag caatatcacg 1260
ggtagccaac gctatgtcct gatagcggtc cgccacaccc agccggccac agtcgatgaa 1320
tccagaaaag cggccatttt ccacatgat attcggcaag caggcatcgc catgtgtcac 1380
gacgagatcc tcgccgtcgg gcatgcgcgc cttgagcctg gcgaacagtt cggctggcgc 1440
gagccctga tgctcttcgt ccagatcatc ctgatcgaca agaccggctt ccatccgagt 1500
acgtgctcgc tcgatgcgat gtttcgcttg gtggtcgaat gggcaggtag ccggatcaag 1560
cgtatgcagc cgccgcattg catcagccat gatggatact ttctcggcag gagcaaggtg 1620
agatgacagg agatcctgcc ccggcacttc gcccaatagc agccagtccc ttcccgttc 1680
agtgacaacg tcgagcacag ctgcgcaagg aacgcccgtc gtggccagcc acgatagccg 1740
cgctgcctcg tcctgcagtt cattcagggc accggacagg tcggtcttga caaaaagaac 1800
cgggcgcccc tgcgctgaca gccggaacac ggcggcatca gagcagccga ttgtctgttg 1860
tgcccagtc tagccgaata gcctctccac ccaagcggcc ggagaacctg cgtgcaatcc 1920
atcttgttca atcatgcgaa acgatcctca tcctgtctct tgatcagatc ttgatcccct 1980
gcgccatcag atccttgggc gcaagaaagc catccagttt actttgcagg gcttcccaac 2040
cttaccagag ggcgccccag ctggcaattc cggttcgctt gctgtccata aaaccgcccc 2100
gtctagctat cgccatgtaa gccactgca agctacctgc tttctctttg cgcttgcggt 2160
ttcccttgtc cagatagccc agtagctgac attcatccgg ggtcagcacc gtttctgcgg 2220
actggctttc tacgtgttcc gcttccttta gcagcccttg cgccctgagt gcttgcgcca 2280
gcgtgaagct 2290

<210> 17
<211> 3906
<212> DNA
<213> Artificial sequence

<220>
<223> pCR2.1 vector

<400> 17
agcgcaccaat acgcaaaccg cctctccccg cgcgttgggc gattcattaa tgcagctggc 60
acgacagggt tcccgactgg aaagcgggca gtgagcgcaa cgcaattaat gtgagttagc 120
tcaatcatta ggcaccccag gctttacact ttatgcttcc ggctcgtatg ttgtgtggaa 180
ttgtgagcgg ataacaattt cacacaggaa acagctatga ccatgattac gccaaagctt 240
gtaccgagct cggatccact agtaacggcc gccagtgtgc tggaattcgg cttaagccga 300

attctgcaga	tatccatcac	actggcgggc	gctcgagcat	gcattctagag	ggcccaattc	360
gccctatagt	gagtcgtatt	acaattcact	ggccgctcgtt	ttacaacgtc	gtgactggga	420
aaaccctggc	gttacccaac	ttaatcgctt	tgcagcacat	ccccctttcg	ccagctggcg	480
taatagcgaa	gaggcccgca	ccgatcgccc	ttcccaacag	ttgcgcagcc	tgaatggcga	540
atgggacgcg	ccctgtagcg	gcgcattaag	cgcggcgggt	gtggtgggta	cgcgcacgct	600
gaccgctaca	cttgccagcg	ccctagcgcc	cgctcctttc	gctttcttcc	cttcctttct	660
cgccacgttc	gccggctttc	cccgtcaagc	tctaaatcgg	gggctccctt	taggggttccg	720
atntagagct	ttacggcacc	tcgaccgcaa	aaaacttgat	ttgggtgatg	gttcacgtag	780
tggggccatcg	ccctgataga	cggttttttcg	ccctttgacg	ttggagtcca	cgttctttaa	840
tagtggaactc	ttgtttccaaa	ctggaacaac	actcaaccct	atcgcggtct	attctttttga	900
tttataaggg	atthttgccga	tttcggccta	ttgggttaaaa	aatgagctga	tttaacaaat	960
tcagggcgca	agggctgcta	aaggaaccgg	aacacgtaga	aagccagtcc	gcagaaacgg	1020
tgctgacccc	ggatgaatgt	cagctactgg	gctatctgga	caagggaaaa	cgcaagcgca	1080
aagagaaaagc	aggtagcttg	cagtgggctt	acatggcgat	agctagactg	ggcggtttta	1140
tggacagcaa	gcgaaccgga	attgccagct	ggggcgccct	ctggtaagggt	tgggaagccc	1200
tgcaaagtaa	actggatggc	tttcttgccg	ccaaggatct	gatggcgag	gggatcaaga	1260
tctgatcaag	agacaggatg	aggatcgttt	cgcattgattg	aacaagatgg	attgcacgca	1320
ggttctccgg	ccgcttgggt	ggagaggcta	ttcggtctatg	actgggcaca	acagacaatc	1380
ggctgctctg	atgccgccgt	gttcgggctg	tcagcgaggg	ggcgcccggt	tctttttgtc	1440
aagaccgacc	tgtccgggtg	cctgaatgaa	ctgcaggacg	aggcagcgcg	gctatcgtgg	1500
ctggccacga	cgggcgttcc	ttgcgcagct	gtgctcgacg	ttgtcactga	agcgggaagg	1560
gactggctgc	tattgggcga	agtgcggggg	caggatctcc	tgtcattctcg	ccttgctcct	1620
gccgagaaaag	tatccatcat	ggctgatgca	atgcggcggc	tgcatacgct	tgatccggct	1680
acctgcccatt	tcgaccacca	agcgaaacat	cgcattcgagc	gagcacgtac	tcggatggaa	1740
gccggtcttg	tcgatcagga	tgatctggac	gaagagcatc	aggggctcgc	gccagccgaa	1800
ctgttcgccca	ggctcaaggc	gcgcattgcc	gacggcgagg	atctcgtcgt	gatccatggc	1860
gatgcctgct	tgccgaatat	catggtggaa	aatggccgct	tttctggatt	caacgactgt	1920
ggccggctgg	gtgtggcgga	ccgctatcag	gacatagcgt	tggataccccg	tgatattgct	1980
gaagagcttg	gcggcgaaatg	ggctgaccgc	ttcctcgtgc	tttacggtat	cgccgctccc	2040
gattcgcagc	gcattcgctt	ctatcgctt	cttgacgagt	tcttctgaat	tgaaaaagga	2100

cggaag

<220>
<223> pUNI vector multiple cloning site

[illegible]